

Additional Summary Data

The information below is additional summary data regarding Vermont's and Maine's state public worker pension plans. All data was obtained from public websites as indicated below. The time period covered by the data is the decade from July 1, 2008 until June 30, 2018. Years in the data below refer to fiscal years ending on June 30th. Most of the data is from plan actuarial reports and some of the performance data is from quarterly reports regularly given to Vermont's plan trustees.

Year	Maine's Assumed Rate of Investment Return (state employees & teachers)	Vermont's Assumed Rate of Investment Return (state employees & teachers)	Maine's Market Value Investment Return (state teachers & employees plan)	Vermont's Market Value Investment Return (state teachers plan)	Vermont's Market Value Investment Return (state employees plan)	Maine's Actuarial Value Investment Return (state teachers & employees plan)	Vermont's Actuarial Value Investment Return (state teachers plan)	Vermont's Actuarial Value Investment Return (state teachers plan)
2009	7.75%	8.25%	-19.00%	-20.49%	-18.80%	-2.71%	-11.23%	-9.55%
2010	7.75%	8.25%	11.28%	19.22%	18.82%	1.26%	6.75%	6.71%
2011	7.25%	8.25%	22.11%	20.97%	21.16%	6.89%	9.32%	9.34%
2012*	7.25%	8.42%	0.50%	2.09%	2.16%	4.77%	6.25%	6.27%
2013*	7.25%	8.39%	11.20%	8.70%	8.55%	6.76%	6.72%	6.71%
2014*	7.25%	8.37%	16.85%	14.44%	14.43%	12.20%	8.29%	8.28%
2015*	7.125%	8.34%	1.80%	-0.07%	-0.15%	6.45%	6.50%	6.46%
2016	7.125%	7.95%	0.32%	1.52%	1.41%	4.42%	6.79%	6.73%
2017	6.875%	7.95%	12.72%	11.20%	11.01%	6.82%	7.34%	7.28%
2018	6.875%	7.50%	9.95%	7.61%	7.41%	7.86%	7.02%	6.93%
Average Annual Return	7.25%	8.17%	6.77%	6.52%	6.60%	5.47%	5.38%	5.52%
Average Annual Weighted Return**	NA	NA	NA	5.92%	6.17%	NA	5.32%	5.61%

* Select-and-ultimate rate used by Vermont: Year 1: 6.25%; Year 2: 6.75%; Year 3: 7%; Year 4: 7.5%; Year 5: 7.75%; Years 6-8: 8.25%; Years 9-15: 8.50%; Year 16: 8.75% and Years 17 and later: 9%. The rate indicated is the average annual return required by the select-and-ultimate rate through 2038, the end of the 30 year amortization period.

**Each year's market value and actuarial value return, as applicable, is weighted by average assets during that year (from 2018 Vermont teachers' and state employees' actuarial reports).

Year	Maine Funded Ratio (state employees & teachers)	Vermont Funded Ratio (state teachers)	Vermont Funded Ratio (state employees)
2009	67.57%	65.40%	78.90%
2010	65.89%	66.50%	81.20%
2011	77.44%	63.80%	79.60%
2012	76.87%	61.60%	77.70%
2013	77.58%	60.50%	76.80%
2014	81.31%	59.90%	77.90%
2015	82.20%	58.60%	75.10%
2016	80.40%	58.30%	74.60%
2017	80.90%	54.20%	71.40%
2018	81.40%	55.20%	70.70%
Change in Ratio	+13.83%	-10.20%	-8.20%

Year (Actuarial Value Investment Return)	Teachers Plan Assets for Valuation Purposes at Prior Fiscal Year End	Flat 8.25% Return	Actuarial Value Investment Return Applied to Plan Assets*	Savings to General Fund by Using Select-and-Ultimate System
2012 (6.25%)	\$1,486,698,448	\$122,652,622	\$92,918,653	\$29,733,969
2013 (6.72%)	\$1,517,410,471	\$125,186,364	\$101,969,984	\$23,216,380
2014 (8.29%)	\$1,552,924,370	\$128,116,261	\$128,737,430	N.A.
2015 (6.50%)	\$1,610,285,523	\$132,848,556	\$104,668,559	\$28,179,997
Total	NA	NA	NA	\$81,130,346

*Actuarial value investment returns (not the market value investment returns) are used to determine whether funding if required from Vermont's General Fund each fiscal year.

Year (Actuarial Value Investment Return)	State Employees Plan Assets for Valuation Purposes at Prior Fiscal Year End	Flat 8.25% Return	Actuarial Value Investment Return Applied to Plan Assets*	Savings to General Fund by Using Select-and-Ultimate System
2012 (6.27%)	\$1,348,762,790	\$111,272,930	\$84,567,427	\$26,705,503
2013 (6.71%)	\$1,400,779,062	\$115,564,273	\$93,992,275	\$21,571,998
2014 (8.28%)	\$1,469,169,902	\$121,206,517	\$121,647,268	N.A.
2015 (6.46%)	\$1,566,075,540	\$129,201,232	\$101,168,480	\$28,032,752
Total	NA	NA	NA	\$76,310,253

*Actuarial value investment returns (not the market value investment returns) are used to determine whether funding if required from Vermont's General Fund each fiscal year.

Year/Vermont's Assumed Rate of Return Remained 8.25% from 2012 to 2015	Value of 2012 General Fund Savings if Assumed Rate of Return Remained at 8.25% from 2012 to 2015	Value of 2013 General Fund Savings if Assumed Rate of Return Remained at 8.25% from 2012 to 2015	Value of 2015 General Fund Savings if Assumed Rate of Return Remained at 8.25% from 2012 to 2015
2012 (8.25%)	\$56 million	NA	NA
2013 (8.25%)	\$60.62 million	\$45 million	NA
2014 (8.25%)	\$65.62 million	\$48.71 million	NA
2015 (8.25%)	\$71.03 million	\$52.73 million	\$56 million
2016 (7.95%)	\$76.68 million	\$56.92 million	\$60.45 million
2017 (7.95%)	\$82.77 million	\$61.45 million	\$65.26 million
2018 (7.50%)	\$88.98 million	\$66.06 million	\$70.15 million
2019 (7.50%)	\$95.65 million	\$71.01 million	\$74.41 million
Totals	\$96 million	\$71 million	\$74 million

Year Of Actuarial Report	Rate of Return Assumption	Vermont Teachers' Pension Plan Expected Investment Income from Actuarial Report	Vermont State Employees' Pension Plan Expected Investment Income from Actuarial Report
2009	8.25%	\$135,527,902	\$116,981,934
2010	8.25%	\$117,191,178	\$104,439,939
2011	8.25%	\$120,493,469	\$108,699,097
2012	Select-and-Ultimate Rate System (6.25%)*	\$97,489,006	\$89,172,623
2013	Select-and-Ultimate Rate System (6.25%)*	\$99,467,032	\$92,891,331
2014	Select-and-Ultimate Rate System (6.25%)*	\$102,110,985	\$97,852,455
2015	Select-and-Ultimate Rate System (6.25%)*	\$105,371,592	\$102,997,526
2016	7.95%	\$134,727,261	\$133,267,435
2017	7.95%	\$134,041,210	\$134,280,290
2018	7.50%	\$131,016,435	\$133,217,195

* Year 1: 6.25%; Year 2: 6.75%; Year 3: 7%; Year 4: 7.5%; Year 5: 7.75%; Years 6-8: 8.25%; Years 9-15: 8.50%; Year 16: 8.75% and Years 17 and later: 9%.

Fiscal Year	Teachers Projected Unfunded Liability in 2009	State Employees Projected Unfunded Liability in 2009	Projected Unfunded Liability in 2009 of Teachers and State Employees' Pension Funds	Teachers Actual Unfunded Liability	State Employees Actual Unfunded Liability	Actual Unfunded Liability of Teachers and State Employees' Pension Funds
2009	727,758,506	326,506,488	1,054,264,994	727,758,506	326,506,488	1,054,264,994
2010	747,496,796	335,362,008	1,082,858,804	711,823,061	293,920,094	1,005,743,155
2011	766,848,405	344,044,044	1,110,892,449	845,107,880	346,537,738	1,191,645,618
2012	785,680,679	352,493,082	1,138,173,761	945,502,316	401,824,745	1,347,327,061
2013	803,844,979	360,642,437	1,164,487,416	1,013,910,285	445,130,082	1,459,040,367
2014	821,175,117	368,417,546	1,189,592,663	1,076,763,810	444,014,326	1,520,778,136
2015	837,485,637	375,735,208	1,213,220,845	1,175,029,030	542,558,818	1,717,587,848
2016	852,569,953	382,502,737	1,235,072,690	1,225,727,845	582,183,599	1,807,911,444
2017	866,198,312	388,617,056	1,254,815,368	1,502,453,387	717,577,722	2,220,031,109
2018	878,115,579	393,963,699	1,272,079,278	1,513,433,355	779,804,010	2,293,237,365

Historical Performance Data for the Vermont Teachers' and State Employees' Pension Plans:

Teachers' Pension Plan/Date	Performance Percentile 1 Year	Performance Percentile 3 Year	Performance Percentile 5 Year	Performance Percentile 7 Year	Performance Percentile 10 Year
June 30, 2009	79	89%	87%	72%	61%
June 30, 2010	4%	57%	45%	NA	NA
June 30, 2011	62%	56%	68%	NA	NA
June 30, 2012	31%	10%	62%	NA	NA
June 30, 2013	93%	63%	67%	NA	NA
June 30, 2014	82%	85%	44%	NA	NA
June 30, 2015	97%	94%	84%	NA	NA
June 30, 2016	27%	86%	88%	NA	NA
June 30, 2017	79%	82%	92%	79%	88%
June 30, 2018	77%	64%	88%	88%	84%

Data above is for the Vermont Teachers' Pension Plan (FYE June 30th). Shaded RED is 61 to 100 percentile; Shaded Yellow is 41 to 60 percentile; Shaded GREEN is above 1 to 40 percentile; 7 year and 10 year performance was not reported to the Trustees from 2010 to 2016 and is unavailable. All data derived by quarterly reports given to plan trustees available here:

<https://www.vermonttreasurer.gov/content/retirement/teacher/financial-reports>)

State Employees' Pension Plan/Date	Performance Percentile 1 Year	Performance Percentile 3 Year	Performance Percentile 5 Year	Performance Percentile 7 Year	Performance Percentile 10 Year
June 30, 2009	69%	83%	77%	73%	76%
June 30, 2010	5%	42%	36%	NA	NA
June 30, 2011	52%	42%	49%	NA	NA
June 30, 2012	27%	7%	42%	NA	NA
June 30, 2013	92%	57%	56%	NA	NA
June 30, 2014	73%	83%	40%	NA	NA
June 30, 2015	97%	92%	80%	NA	NA
June 30, 2016	33%	87%	88%	NA	NA
June 30, 2017	77%	84%	91%	77%	82%
June 30, 2018	76%	64%	88%	86%	79%

Data above is for the State Employees' Pension Plan (FYE June 30th). Shaded RED is 61 to 100 percentile; Shaded Yellow is 41 to 60 percentile; Shaded GREEN is above 1 to 40 percentile; 7 year and 10 year performance was not reported to the Trustees from 2010 to 2016 and is unavailable. All data derived by quarterly reports given to plan trustees available here:

<https://www.vermonttreasurer.gov/content/retirement/state/financial>)

Year	Vermont Teachers Plan Composite Returns	Vermont State Employees Plan Composite Returns	Vermont Teachers & State Employees Plan Peer Median Returns
2009	-19.80%	-18.70%	-16.60%
2010	18.00%	17.90%	13.10%
2011	20.50%	21.20%	21.20%
2012	2.20%	2.40%	1.20%
2013	8.50%	8.60%	11.70%
2014	14.20%	14.50%	16.00%
2015	-0.20%	0.10%	3.20%
2016	1.30%	1.00%	0.40%
2017	10.40%	10.60%	11.90%
2018	6.70%	6.70%	7.50%
Average Annual	6.18%	6.43%	6.96%

Composite Returns and Median Returns are from fiscal year-end Financial Snapshots given to pension plan trustees and these reports are based on market value returns. These returns above are similar but not identical to the market value returns in the actuarial reports.

Sources Used in the Commentary and Additional Data Summary PDF:

Maine State and Employee Pension Plans: <https://mainepers.org/Publications/Publications.htm#Valuations>

Vermont State Employee Pension Plan: <https://www.vermonttreasurer.gov/content/retirement/state/financial>

Vermont Teachers Pension Plan: <https://www.vermonttreasurer.gov/content/retirement/teacher/financial-reports>

Vermont Treasurer's report to the House Committee on Government Operations on January 11, 2019:
<https://legislature.vermont.gov/Documents/2020/WorkGroups/House%20Government%20Operations/Office%20of%20the%20Vermont%20State%20Treasurer/W~Beth%20Pearce~State%20Treasurers%20Office%20-%20Pensions%20and%20Retirment~1-11-2019.pdf>